

# V&V Reference Report

## L2 ASCDS Version : 8.4.3

Observation 13643 - L2 Version 2  
Chandra X-Ray Center

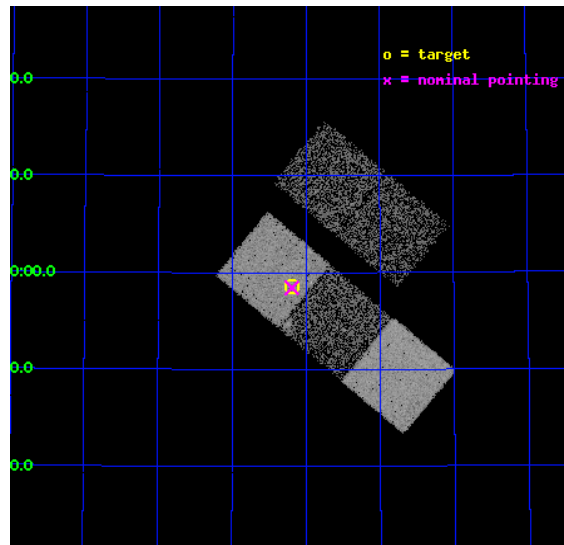
L2 Processing Date : Feb 29 2012

## Contents

<b>1</b>	<b>Front</b>	<b>2</b>
<b>2</b>	<b>OBI</b>	<b>3</b>
2.1	OBI . . . . .	3
2.1.1	Images . . . . .	3
2.1.2	Bias . . . . .	3
2.1.3	Parameters . . . . .	4
2.1.4	Events . . . . .	4
2.2	Compared Parameters . . . . .	5
2.3	Aspect . . . . .	6
2.4	Star Slots . . . . .	9
2.4.1	Slot 3 . . . . .	9
2.4.2	Slot 4 . . . . .	10
2.4.3	Slot 5 . . . . .	11
2.4.4	Slot 6 . . . . .	12
2.4.5	Slot 7 . . . . .	13
2.5	FID Slots . . . . .	14
2.5.1	Slot 0 . . . . .	14
2.5.2	Slot 1 . . . . .	15
2.5.3	Slot 2 . . . . .	16
<b>A</b>	<b>Summary</b>	<b>17</b>
A.1	Status . . . . .	17
A.2	Comments . . . . .	17

# 1 Front

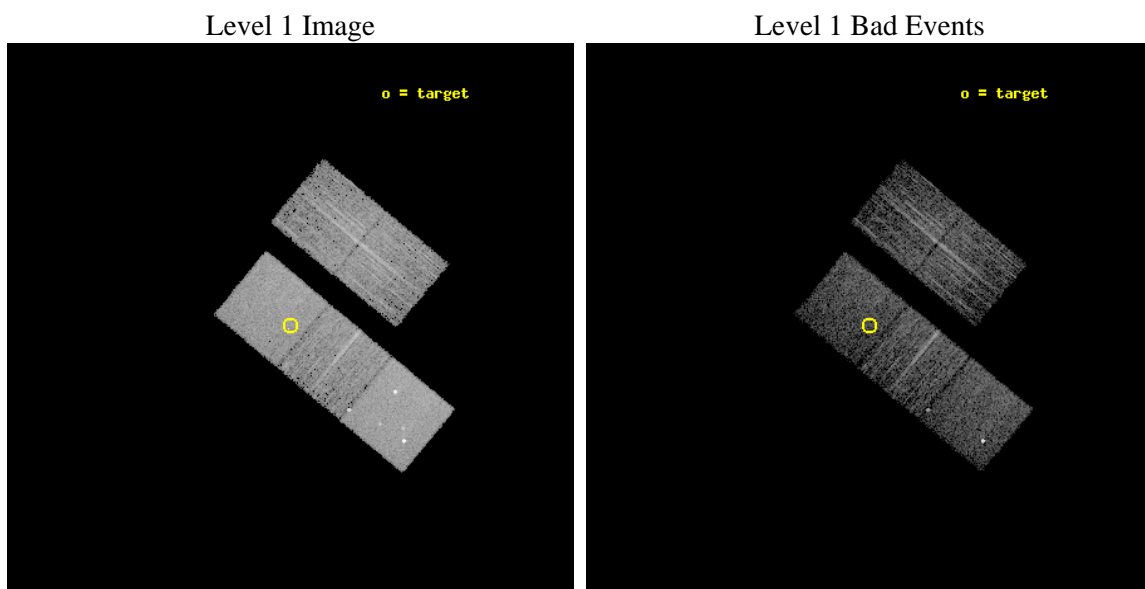
seq_num	200797	Sequence number
obs_id	13643	Observation id
title	LIVING WITH A RED DWARF: MAGNETIC ACTIVITY, XUV IRRADIANCES OF dM STARS - EXOPLANET ATMOSPHERES AND ENVIRONMENT IMPACTS	Proposal titl
observer	Dr. Edward Guinan	Principal investigator
object	LHS 26	Source name
dtcycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	67.797917	Observer's specified target RA [deg]
dec_targ	58.977111	Observer's specified target Dec [deg]
ra_nom	67.798551157285	Nominal RA [deg]
dec_nom	58.974059808805	Nominal Dec [deg]
roll_nom	219.73194470555	Nominal Roll [deg]
revision	2	Processing version of data
ontime	5043.7000387907	Sum of GTIs [s]
livetime	4977.800384666	Livetime [s]
ontime2	5043.7000387907	Sum of GTIs [s]
ontime3	5043.7000387907	Sum of GTIs [s]
ontime5	5043.7000387907	Sum of GTIs [s]
ontime6	5043.7000387907	Sum of GTIs [s]
ontime7	5043.7000387907	Sum of GTIs [s]
l2events	51088	Number of level 2 events



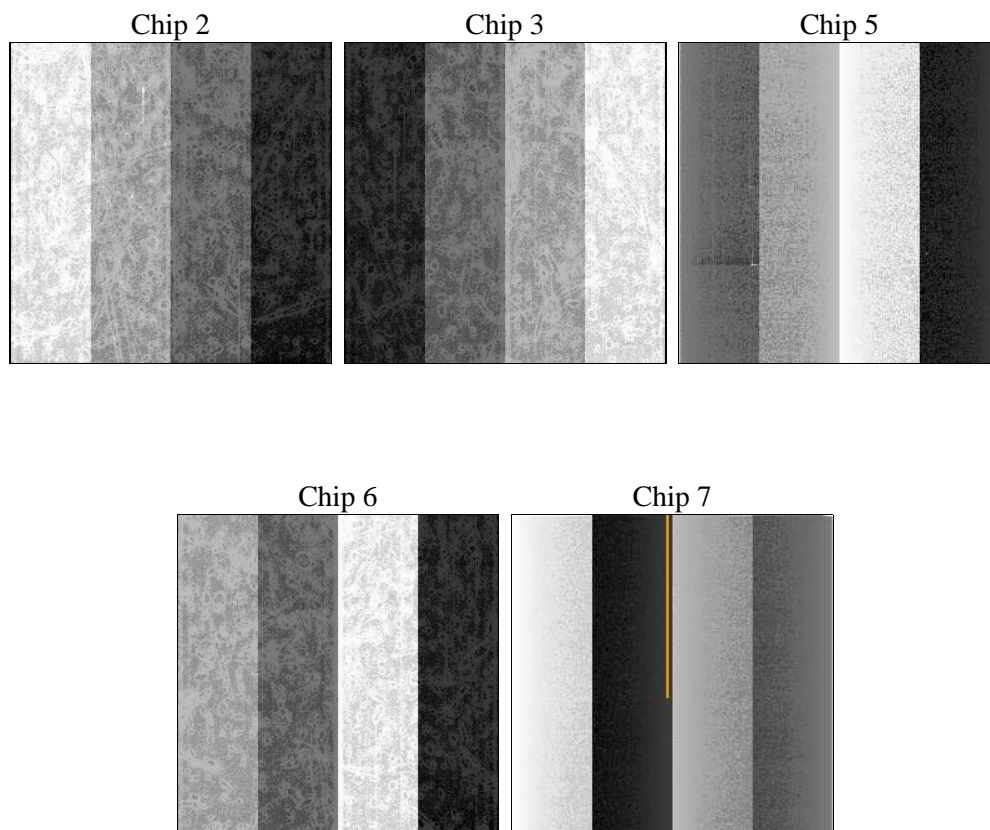
## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias



### 2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	5000.000000	[s] Scheduled observation exposure time
ascdsver	8.4.3	Processing system revision	ontime	5043.7000387907	Sum of GTIs [s]
caldsver	4.4.8	&#160	ontime2	5043.7000387907	Sum of GTIs [s]
date	2012-02-29T12:42:35	Date and time of file creation	ontime3	5043.7000387907	Sum of GTIs [s]
revision	2	Processing version of data	ontime5	5043.7000387907	Sum of GTIs [s]
			ontime6	5043.7000387907	Sum of GTIs [s]
			ontime7	5043.7000387907	Sum of GTIs [s]
			l1events	191312	Number of level 1 events

### 2.1.4 Events

	ccd 2	ccd 3	ccd 5	ccd 6	ccd 7
level 1 events	32232	30656	54090	32322	42012
rejected events	28660	27315	27257	28329	23287
rejected %	88%	89%	50%	87%	55%

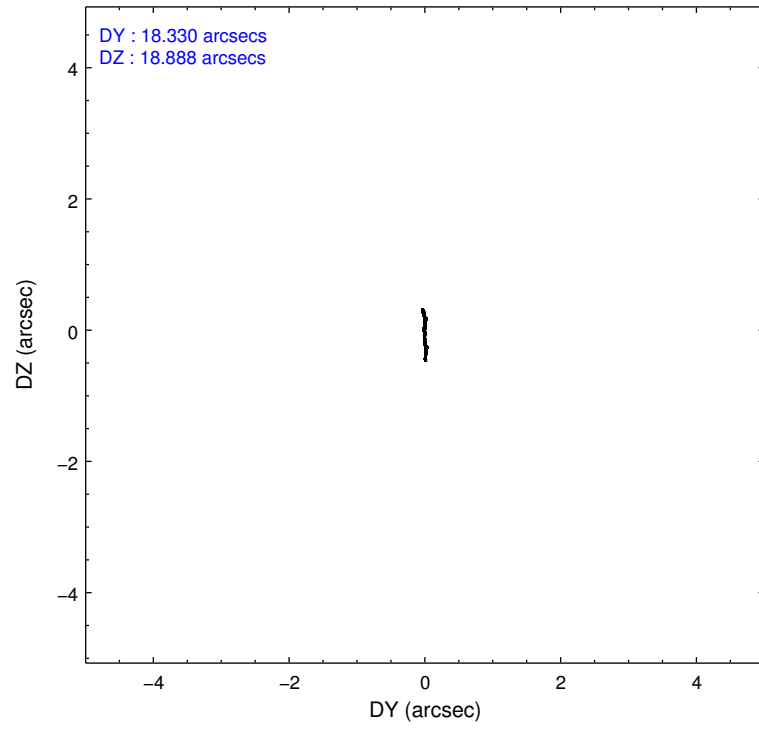
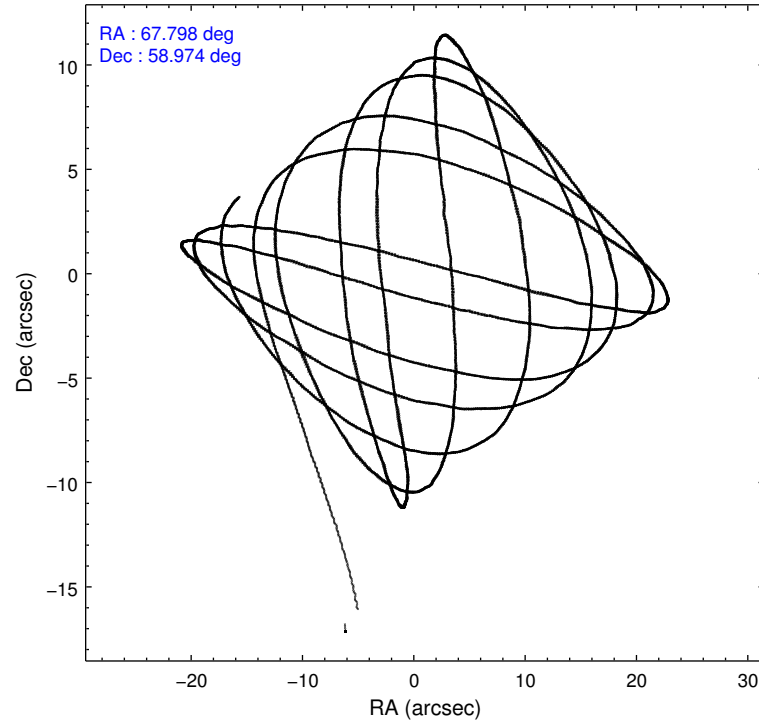
	ccd 2	ccd 3	ccd 5	ccd 6	ccd 7
grade 0 events	1241	1134	3570	1453	1756
	3%	3%	6%	4%	4%
grade 1 events	17	15	285	19	49
	0%	0%	0%	0%	0%
grade 2 events	886	755	8044	843	3852
	2%	2%	14%	2%	9%
grade 3 events	382	378	1014	430	1670
	1%	1%	1%	1%	3%
grade 4 events	383	364	901	398	1641
	1%	1%	1%	1%	3%
grade 5 events	1317	1551	4233	1610	4275
	4%	5%	7%	4%	10%
grade 6 events	682	711	13334	873	9830
	2%	2%	24%	2%	23%
grade 7 events	27324	25748	22709	26696	18939
	84%	83%	41%	82%	45%

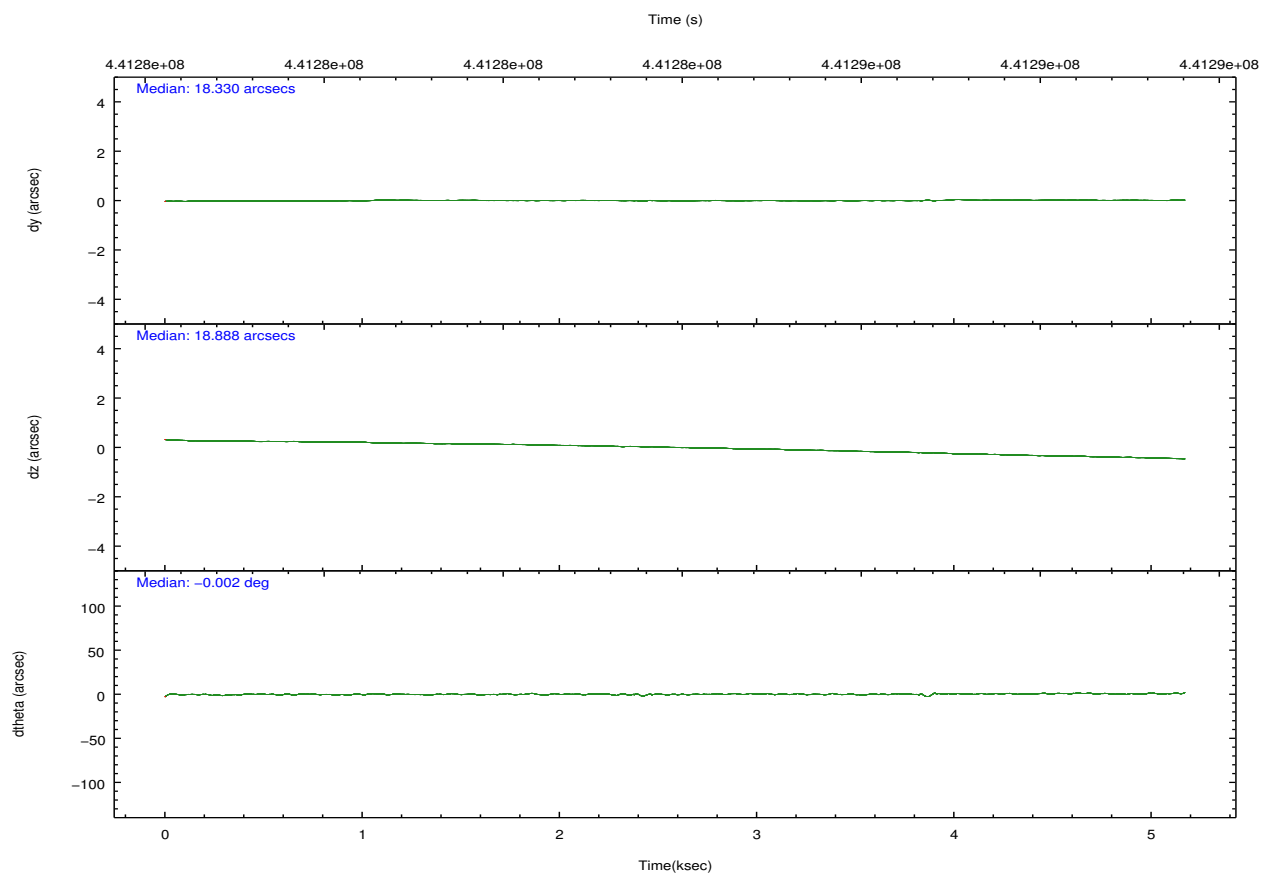
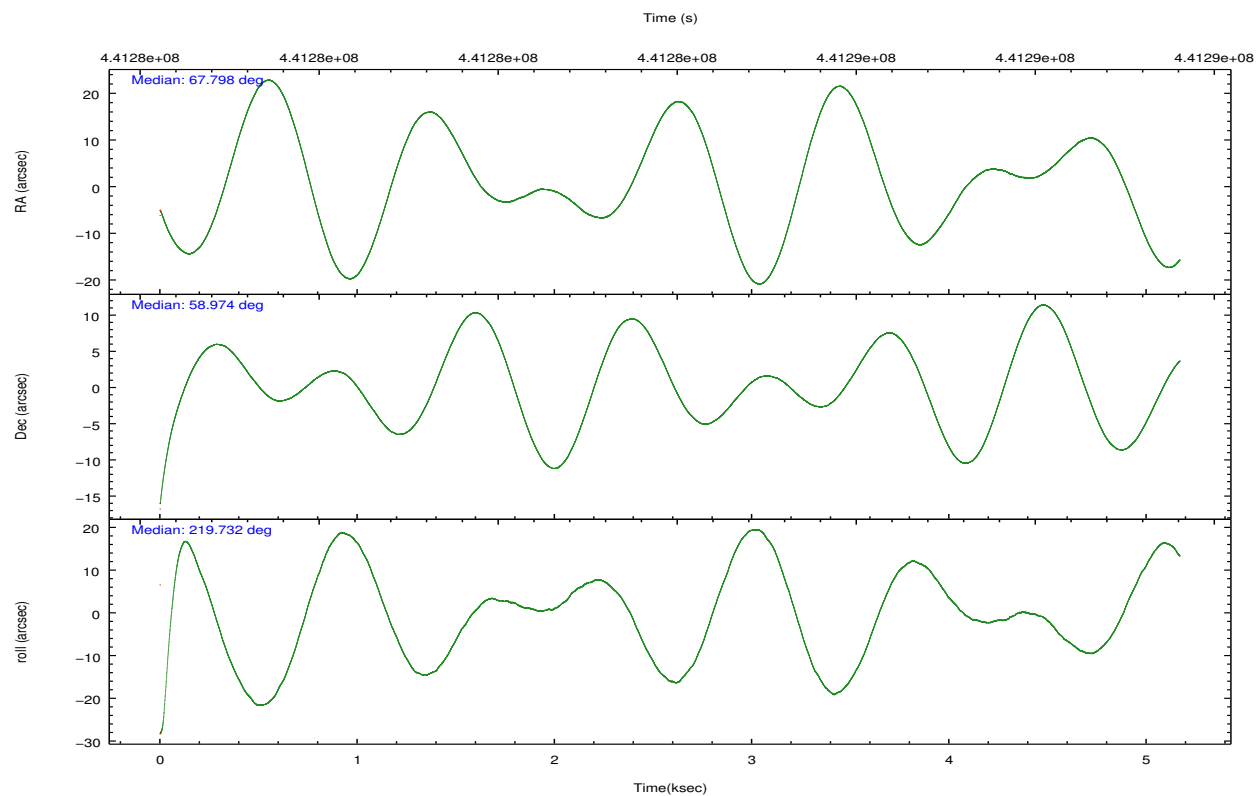


## 2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-23567	ACIS-23567	Obspar file type	PREDICTED	ACTUAL
Grating	NONE	NONE	Obspar update status	NONE	UPDATED
Data mode	FAINT	FAINT	Number of optional ACIS chips dropped	0	0
Observation mode	POINTING	POINTING	On-chip summing requested	N	N
[deg] Pointing RA	67.816376	67.79855115728509	Subarray requested	NONE	NONE
[deg] Pointing Dec	58.999891	58.97405980880549	Alternating exposures requested	N	N
[deg] Pointing Roll	219.560124	219.7319447055496	[s] Primary exposure time	0.000000	3.1
[mm] SIM focus pos	-0.684267	-0.6828225247311905			
[mm] SIM defocus	0	0.001444936568705701			
[mm] SIM translation stage pos	-190.132523	-190.1425803651734			
[mm] SIM translation stage offset	0	0.01005778216563158			
[s] Observation start time (MET)	441282539.184000	441281401.07037			
Observation start date	2011-12-26T10:27:53	2011-12-26T10:10:01			
[s] Observation end time (MET)	441287539.184000	441287932.37071			
Observation end date	2011-12-26T11:51:13	2011-12-26T11:58:52			
Read mode	TIMED	TIMED			

## 2.3 Aspect



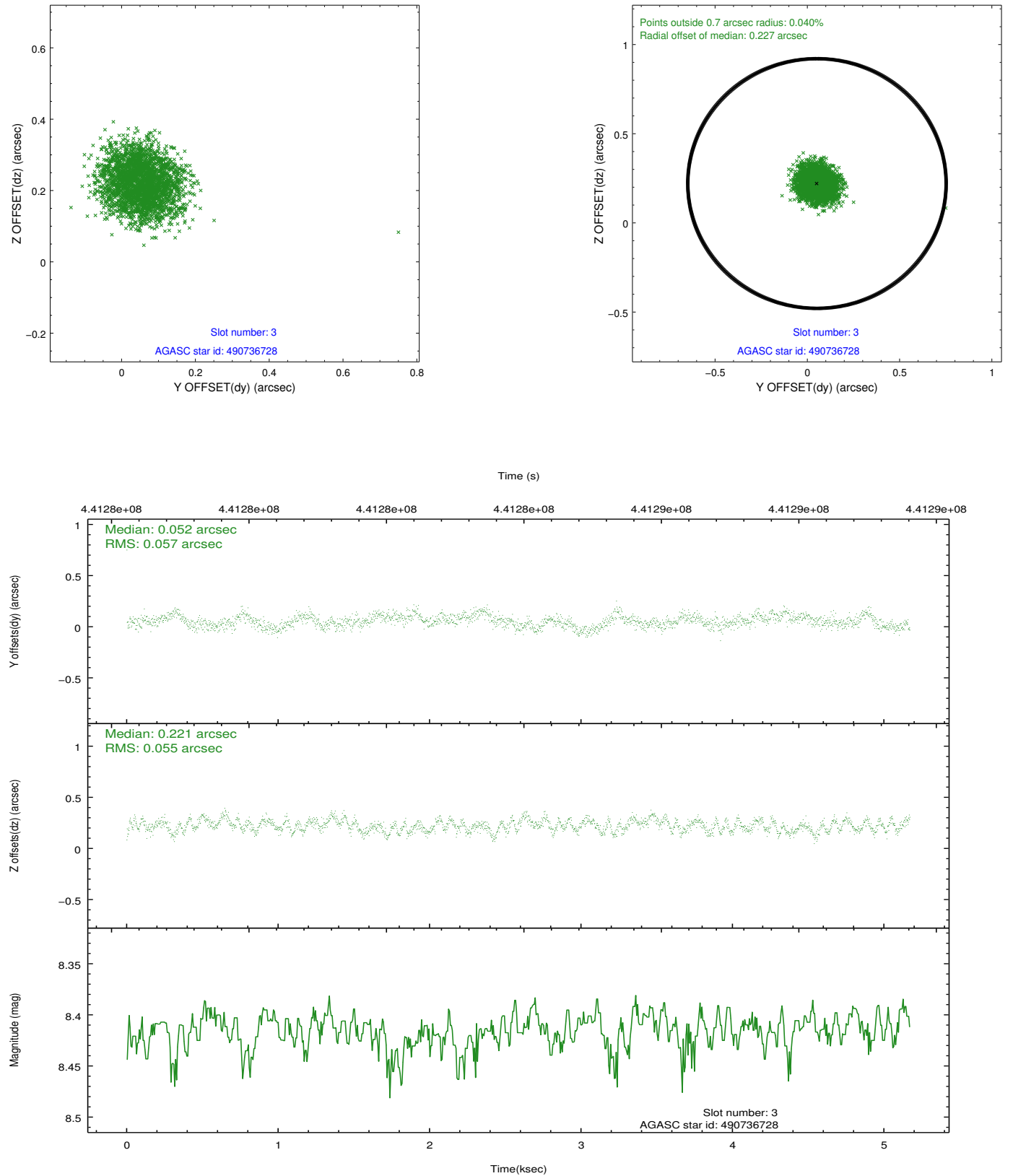


### Slot Statistics

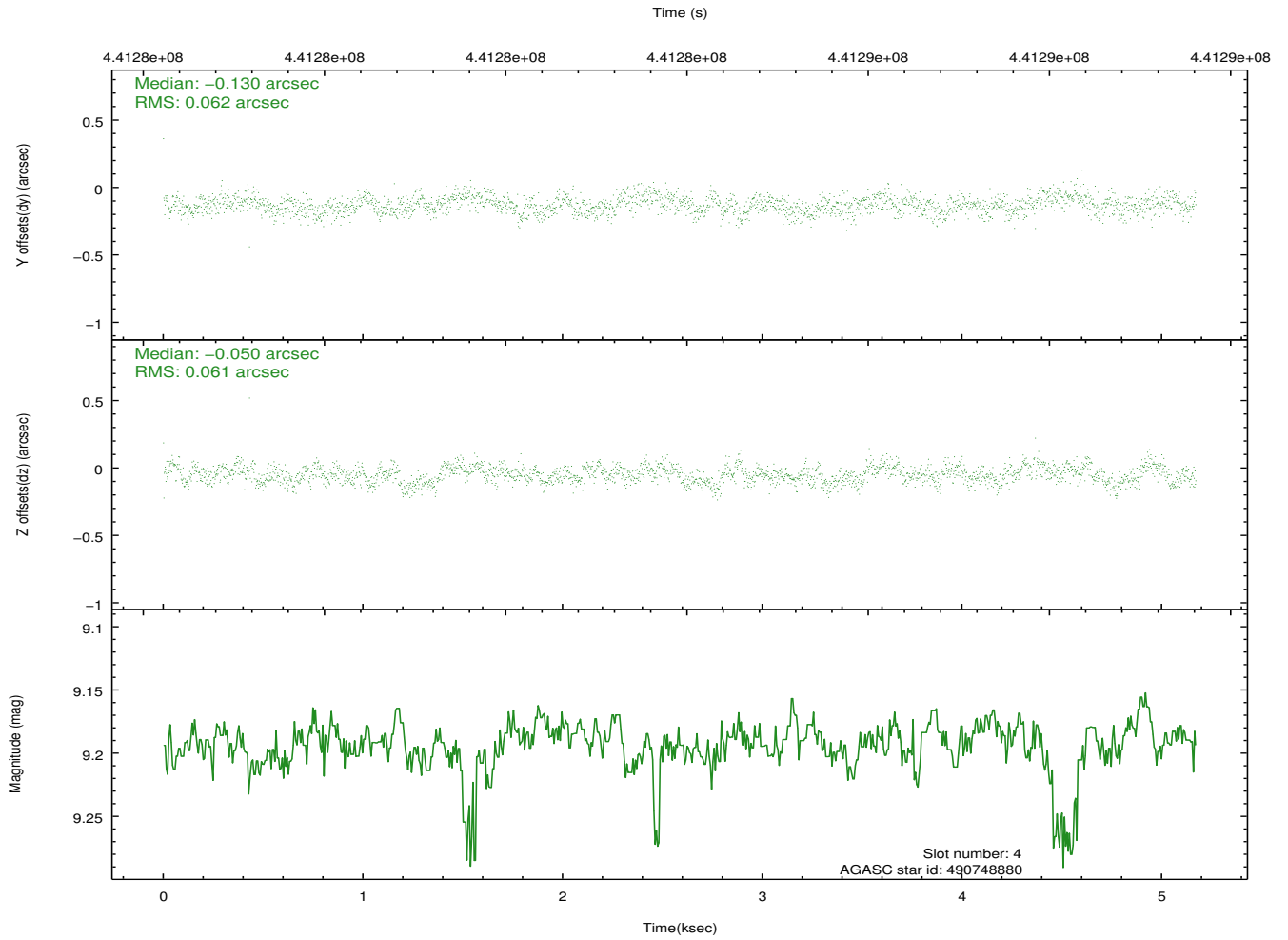
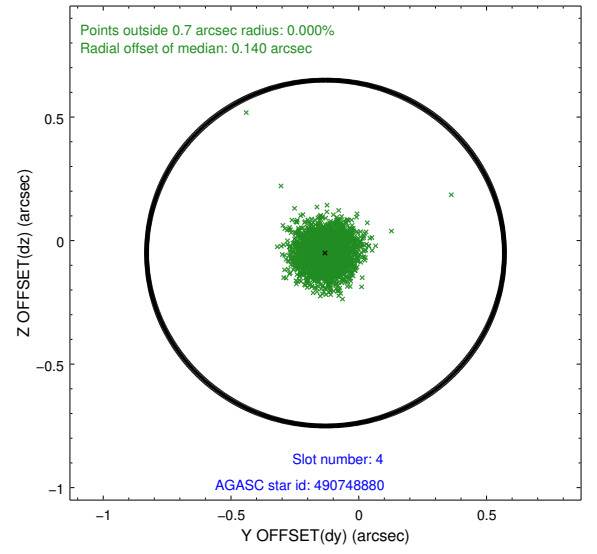
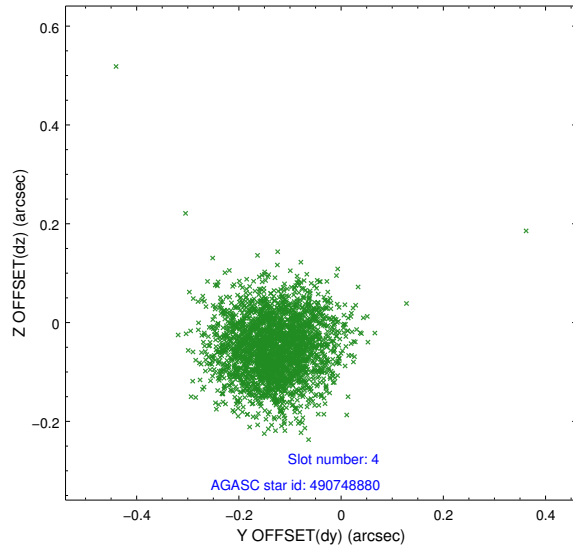
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-2	6.91	1262	-0.143	-0.083	0.006	0.011	0.000000	0.000000	-771.60	-1740.34
1	FID	ACIS-S-4	7.00	1262	0.167	0.080	0.006	0.011	0.000000	0.000000	2141.52	166.98
2	FID	ACIS-S-6	7.13	1262	-0.052	0.010	0.007	0.011	0.000000	0.000000	392.06	805.70
3	GUIDE	490736728	8.42	2523	0.052	0.221	0.084	0.130	68.418539	59.478100	-1948.31	-629.47
4	GUIDE	490748880	9.19	2516	-0.130	-0.050	0.092	0.146	67.462444	58.369807	1957.74	1322.47
5	GUIDE	490749296	8.99	2519	0.127	0.097	0.100	0.158	67.338310	58.527102	1775.59	738.17
6	GUIDE	490737376	8.79	2521	-0.182	-0.204	0.124	0.186	68.186110	58.314501	1031.78	2345.87
7	GUIDE	490743944	9.21	2519	0.129	-0.063	0.093	0.157	69.079101	59.218564	-2308.88	859.52

## 2.4 Star Slots

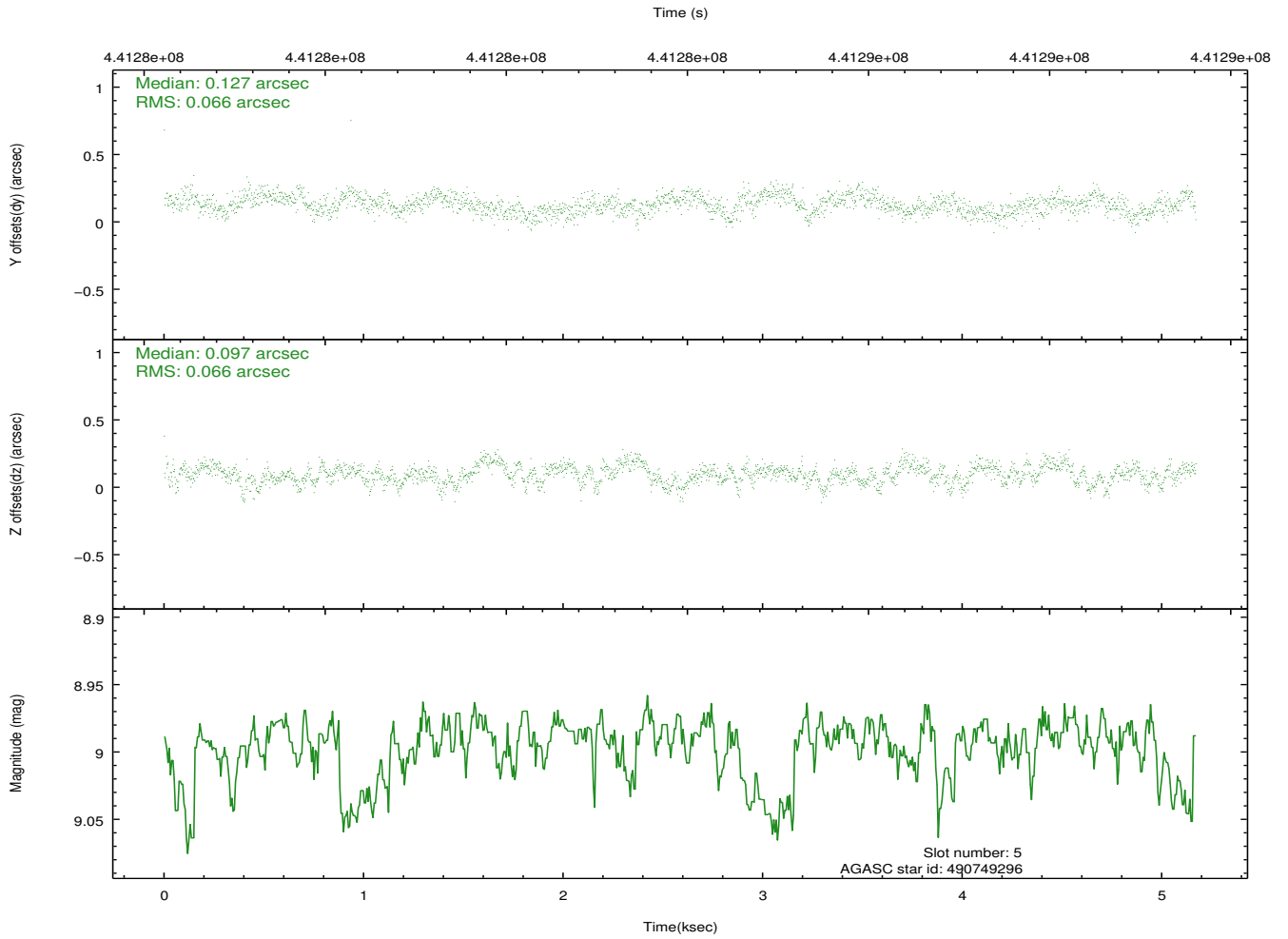
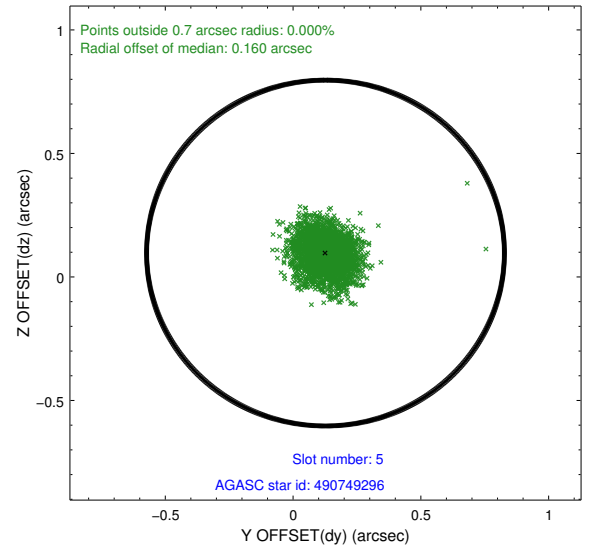
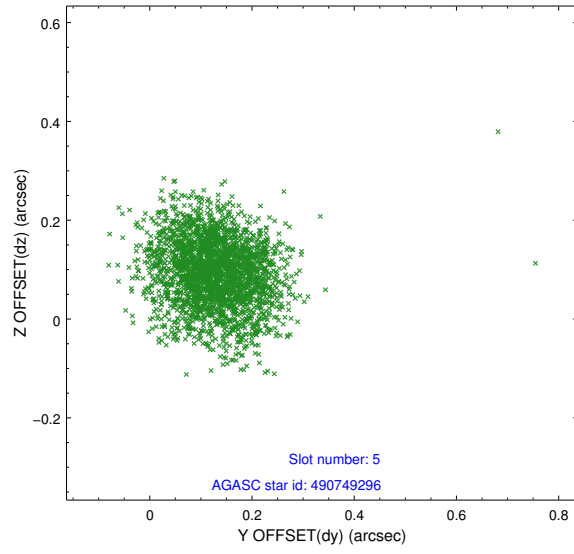
### 2.4.1 Slot 3



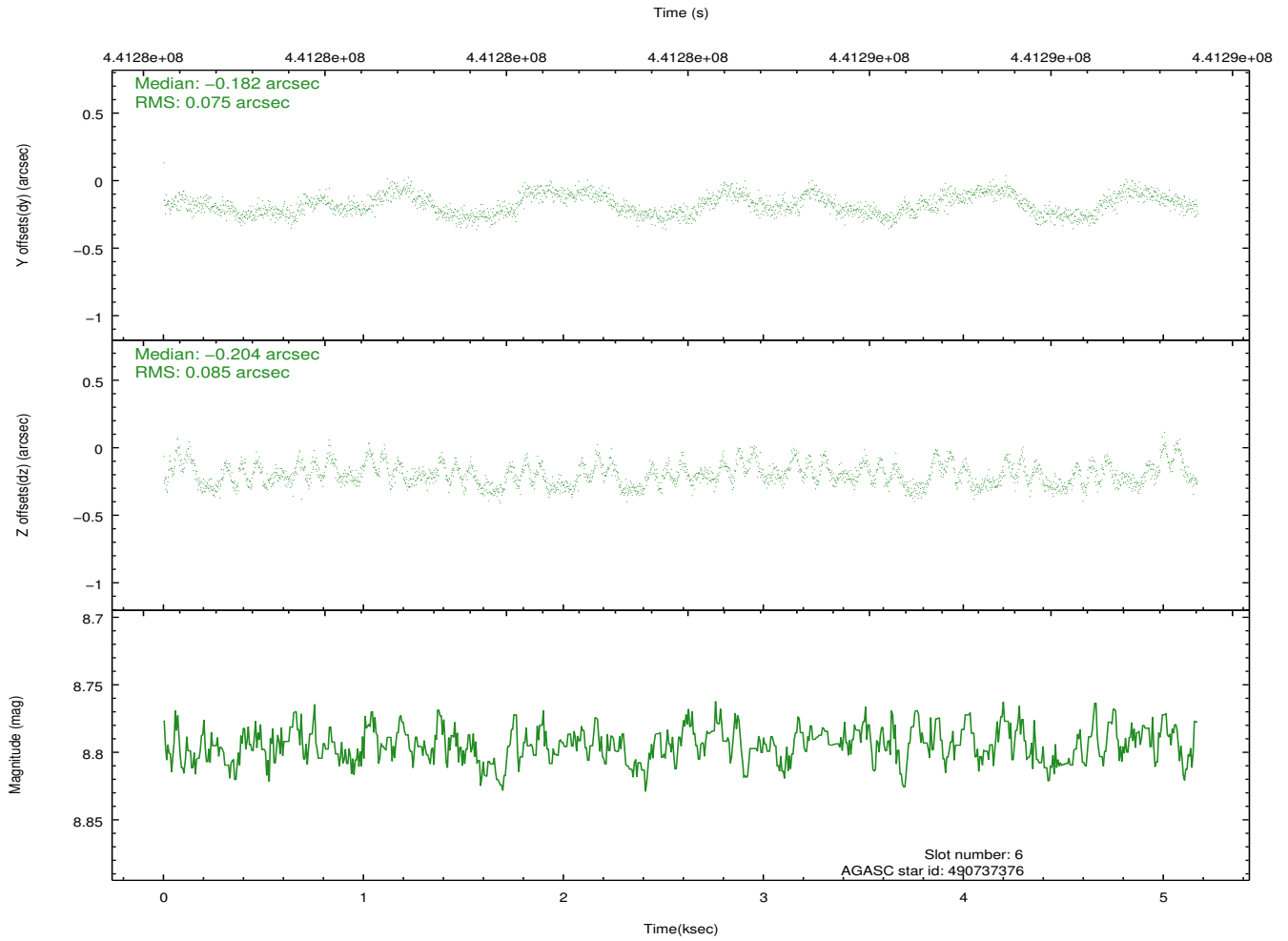
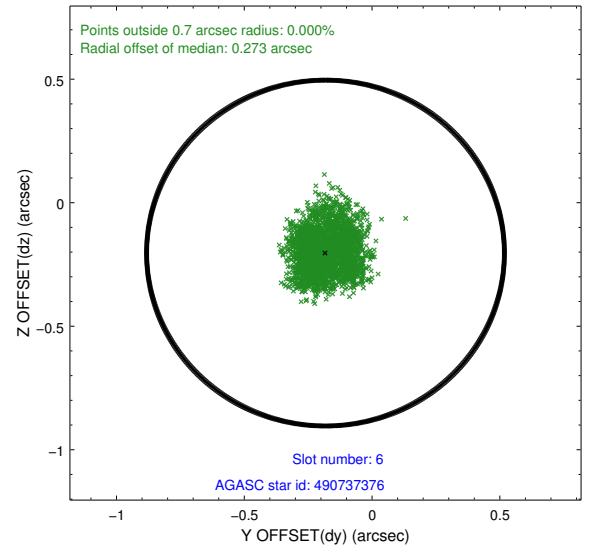
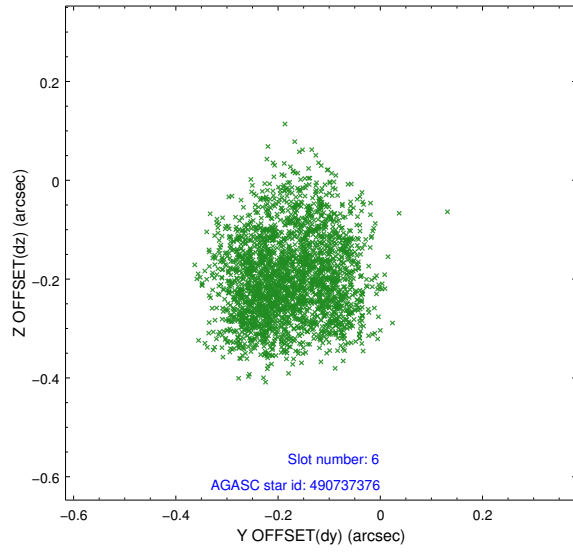
## 2.4.2 Slot 4



### 2.4.3 Slot 5

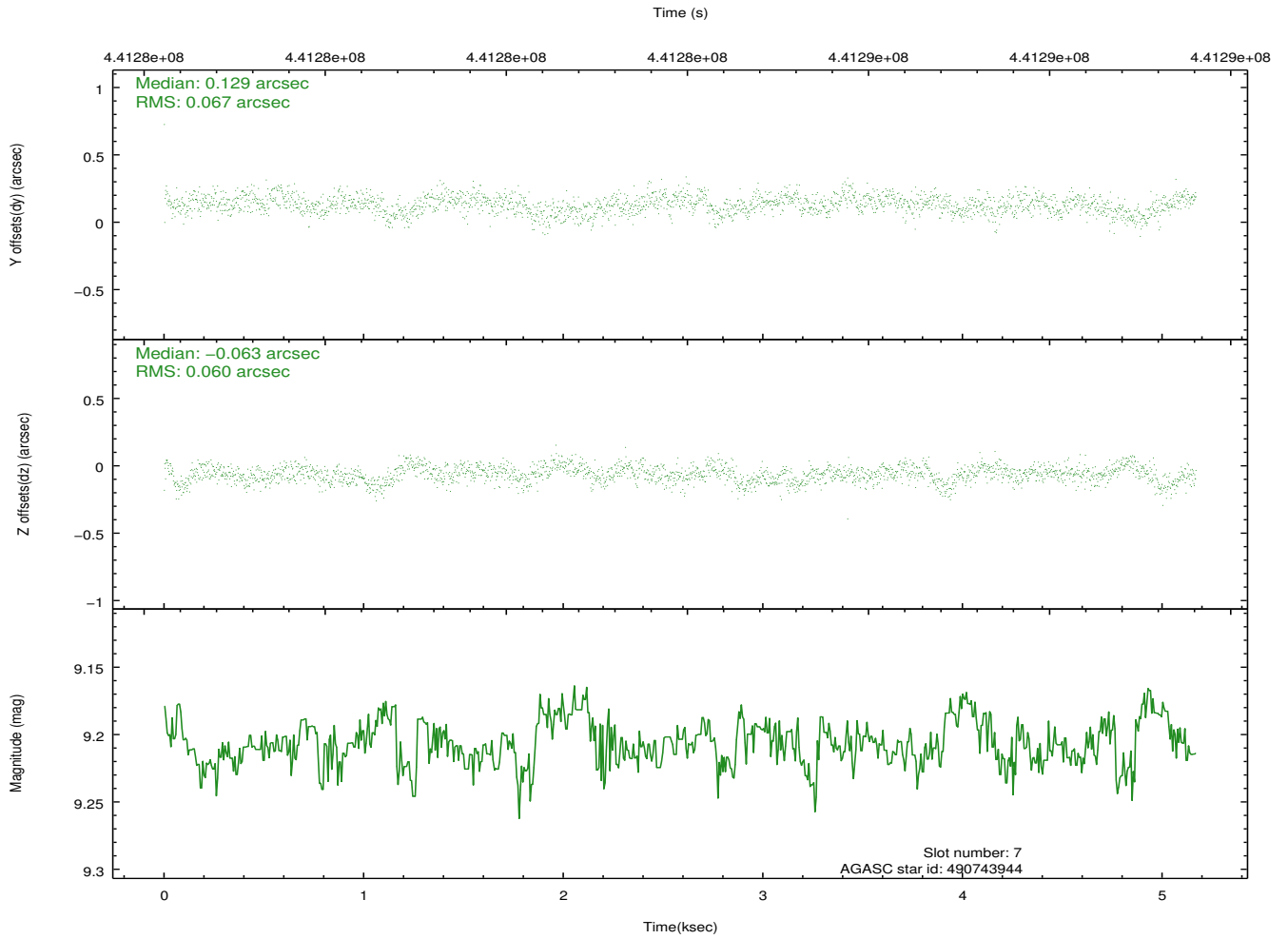
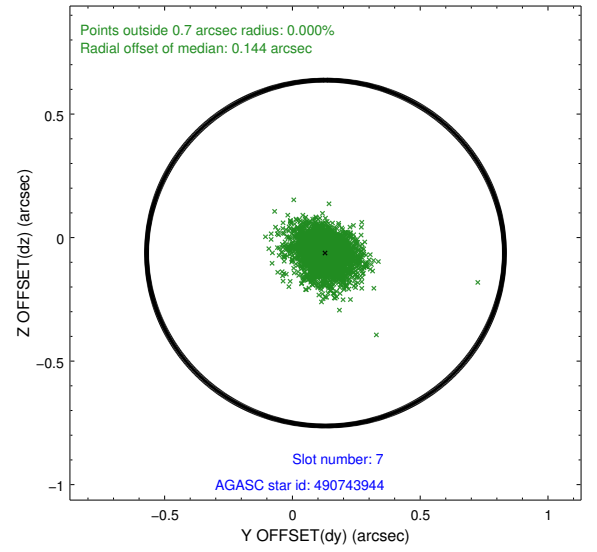
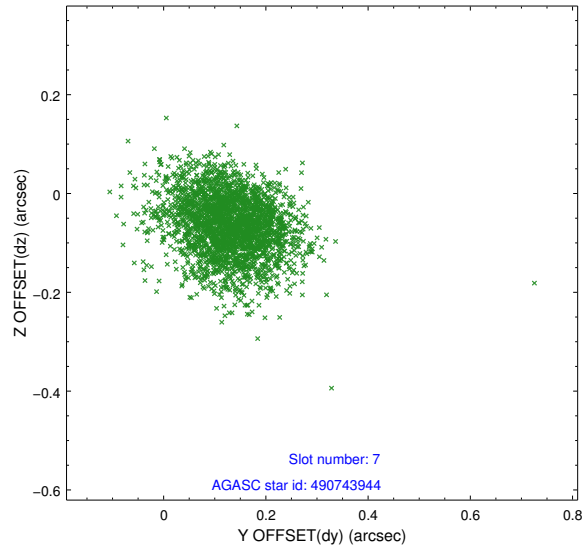


## 2.4.4 Slot 6



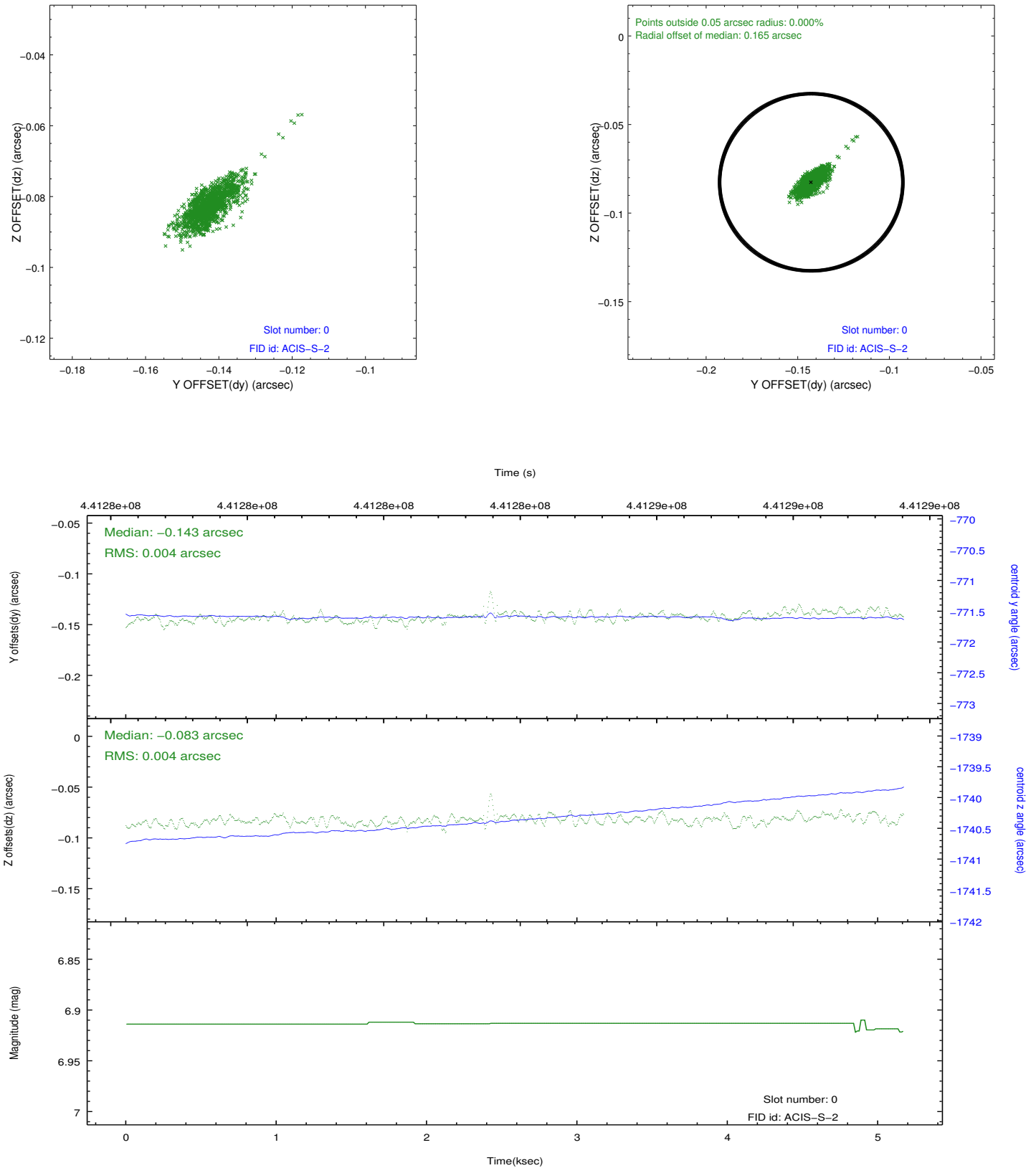


## 2.4.5 Slot 7

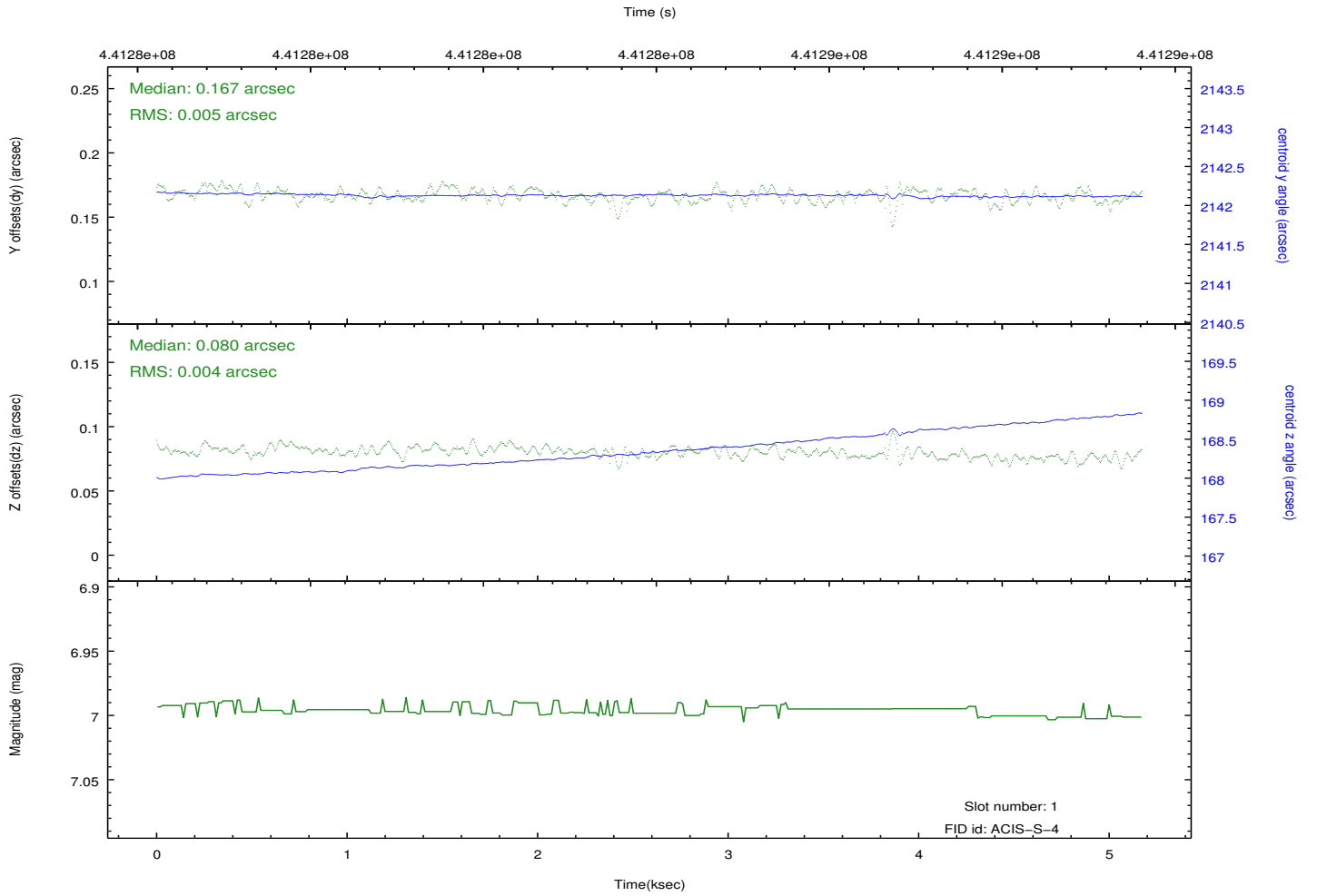
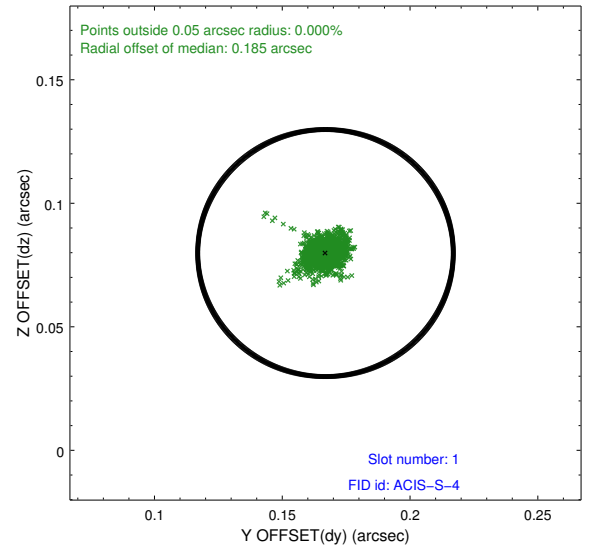
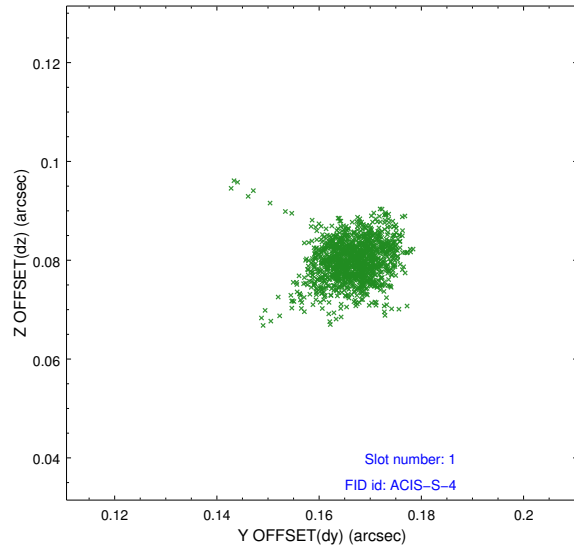


## 2.5 FID Slots

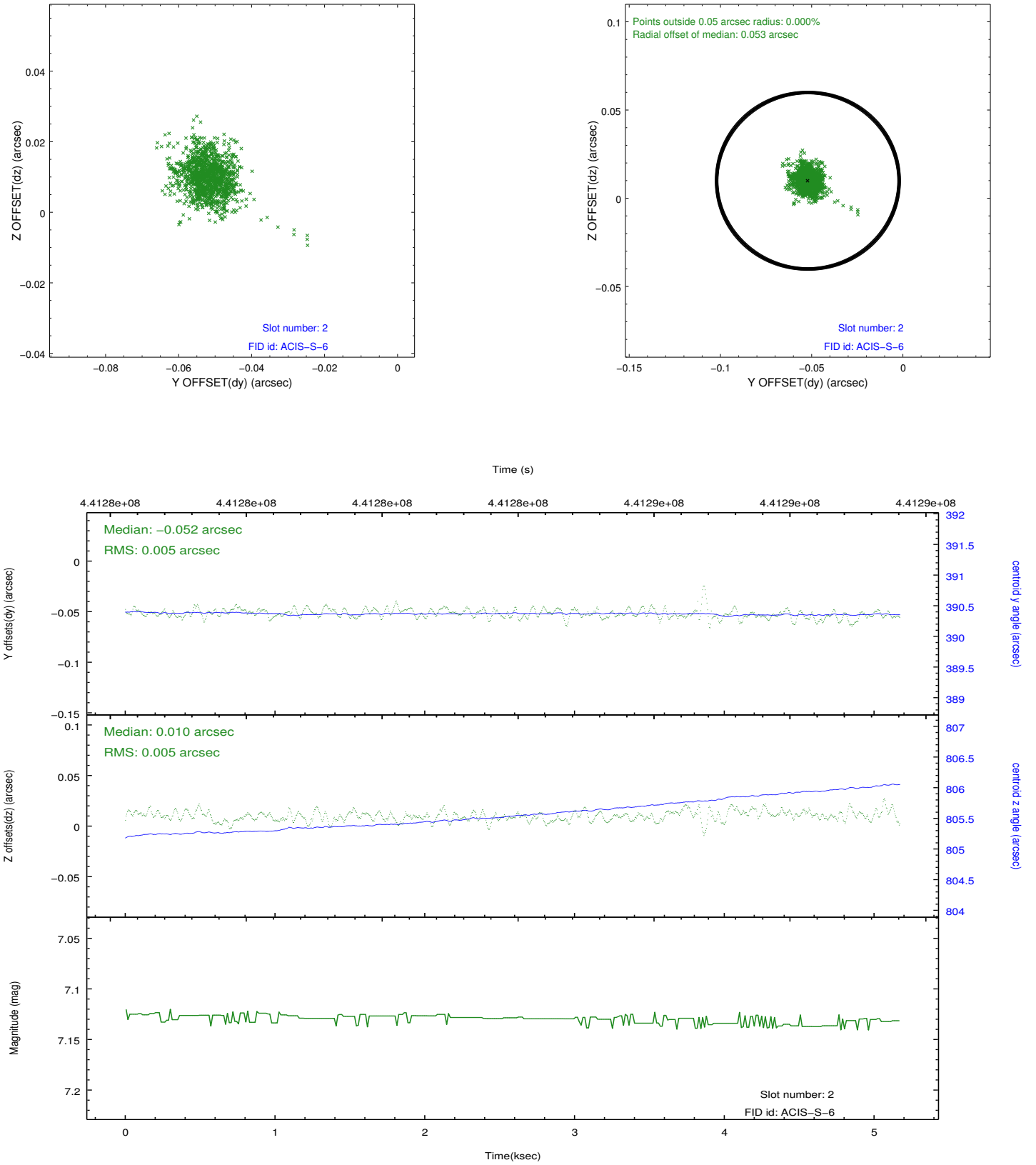
### 2.5.1 Slot 0



## 2.5.2 Slot 1



### 2.5.3 Slot 2



## A Summary

### A.1 Status

V&V Scientist	Jen Lauer
V&V Date (YYYY-MM-DD)	2012.02.29
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	5.0437000387907

### A.2 Comments